individual rejections set forth in the Office Action (Paper No. 23), Applicants request that the Examiner consider the following remarks.

In the office action, the Examiner has repeatedly stated that "[I]t would have been obvious to one of ordinary skill in the art at the time the invention was made to include a database and search retrieval mechanism to locate the needed network address because such mechanism permits the database to be modified over time to allow dynamic address assignment thus reducing the need to large address identifiers and thus the amount of data that needs to be transmitted with each packet of data."(Paper No. 23, paragraph 11). Applicants respectfully note that this mischaracterization of the motivation for the invention was first introduced by the prior Examiner (Paper 18, paragraph 7). Applicants' invention solves a fundamental problem associated with the Internet. The problem is not reducing the need for larger address identifiers. The problem is not the amount of data which needs to be transmitted with each packet over the network. The problem is: How can a global network user be located if he/she has no permanent network address?

Applicants have disclosed a solution to the above-described problem. The solution utilizes a client/ server system. In the disclosed system, a client process contacts a dedicated address directory server and forwards to the server the network protocol address to which it has been assigned upon connection to the computer network, along with other identification information. The dedicated address directory server maintains a compilation or list of entries, each of which contain a process identifier and the corresponding network protocol address forwarded to the server by the process itself. Other processes wishing to contact a desired target process simply query the address directory server to determine whether the target process is on-line and the current network protocol address at which the target process is located. The server forwards the network protocol address of the target process to the querying process. The querying process utilizes the information to establish a point-to-point communication with the target process.

The Examiner is relying primarily on Morgan to disclose a database containing one or more network addresses. The Examiner will note that although a database may be programmable or contain writable memory, such a database does not teach or suggest Applicants' inventive client/service system in which the client processes themselves update the database with their current information. This aspect distinguishes Applicants' system from the art of record.

Applicants have cancelled claims 1-4, and 6-11 without prejudice. Accordingly, any rejections of those claims are hereby deemed moot.

Applicants have made global amendments to the claims to ensure consistent use terminology throughout the claims and to conform the claims to 35 U.S.C. Section 112, 2nd paragraph. Specifically, the term "means" has been eliminated from the remaining pending claims. Also, all occurrences of "processors" have been changed to "process". Various other claims have been made for clarity sake. Such amendments are not necessitated by any reference cited by the Examiner but are offered to clarify the claim language and to more particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

The Examiner has rejected the remaining pending claims under 35 USC §103 as being unpatentable over U.S. Patent 5,740,231 (Cohn et al.) in view of U.S. Patent 5,524,254 (Morgan et al.). Applicants respectfully assert that the claims, as amended, patentably distinguishes over the combined teachings of Cohn and Morgan for the following reasons. As stated by the Examiner, Cohn does not specify searching a database to match an address with a destination node. Although the sections of Morgan cited by the Examiner disclose an address recognition engine which reads each request and uses the address contained in the request as an index into an information database for look-up of a corresponding entry (Morgan, column 4, lines 44-56), the Examiner has failed to show where Morgan discloses a database in which the client process supply the database with their respective network addresses.

Claim 21 is directed to a computer program product for use with a computer system functioning as a client process in the inventive client/server

system of the subject application. Claim 21 has been amended to recite "program code for transmitting to the server a network protocol address received by the first process following connection to the computer network " (claim 21, lines 9-10). None of the references cited by the Examiner, whether considered singularly or in combination, disclose, teach or suggest a process or client process which forwards its network protocol address received upon connection to the computer network to a server. As discussed previously, the reporting or "logging-in" of a client process with an address directory server to provide the server with the current network protocol address at which the process can be located is not shown in the prior art.

Claim 23 is an apparatus claim directed to the server portion of Applicants' inventive system. Claim 23 has been amended to now recite an apparatus comprising a processor, a network interface and "a memory ... for storing a network protocol address for selected of a plurality of processes, each network protocol address stored in the memory following connection of the respective process to the computer network" (claim 23, lines 7-10). Claim 23 is believed patentable over the art of record, particularly the Morgan reference, as none of the references disclose or suggest, whether considered singularly or in combination the subject matter now claimed. Claim 24 includes all the limitations of claim 23 and is likewise believed patentable over the cited references for the same reasons as claim 23.

Claim 26 recites a method and has been amended similarly to claim 23. Specifically, claim 26 now recites a method for enabling point-to-point communication between a first process and a second process over a computer network including the step of "receiving and storing in a computer memory a respective network protocol address for selected of a plurality of processes that have an on-line status with respect to the computer network, each of the network protocol addresses received following connection of the respective process to the computer network" (claim 26, lines 6-11). As stated previously, none of the references of record, particularly Morgan et al., are believed to disclose a process for storing network protocol address in which the network protocol

address are received following connection of the process to the computer network. Claims 27-31 include all the limitations of claim 26 and are likewise believed patentable over the art of record for the same reasons as claim 26.

Applicants are puzzled by Examiner's assertion in Paragraphs 16 and 17 of the Office Action that claims 32-42 and 43-53 fail to teach or define beyond the subject matter of claims 1-4. Claims 32-42 are directed to a method for establishing a point-to-point communication link with the user interface of a client process by associating elements representing a communication line and various processes. None of the references cited by the Examiner, including Gordon, Morgan, Cohn and December disclose or suggest a user interface or a technique for establishing communications by manipulation of user interface elements. Claims 43-53 are computer program product claims and are directed to a computer program product containing program code for performing a process similar to the method defined in claims 32-42. Applicants respectfully assert that claims 32-53 with, or without the current amendments patentably distinguish over the cited references, whether considered singularly or in combination. Applicants respectfully assert that the Examiner has failed to disclose where any of the cited references teach or suggest a user interface for establishing point-to-point communications by associating user interface elements representing various processes and communication lines.

Claim 54 recites a method of locating a process over a computer network comprising the step of "maintaining an Internet accessible list having a plurality of selected entries, each entry comprising an identifier and a corresponding Internet protocol address of a process currently connected to the Internet, the Internet protocol address added to the list following connection of the process to the computer network" (claim 54, lines 3-7). For reasons similar to those stated with reference to claims 23 and 26, claim 54 is believed patentable over the art of record.

Claim 55 also recites a method of locating processes over a computer network. Claim 55 has been amended to include the step of "maintaining, in a computer memory, a network accessible compilation of entries, selected of the

entries comprising a network protocol address and a corresponding identifier of a process connected to the computer network, the network protocol address of the corresponding process assigned to the process upon connection to the computer network (claim 55, lines 4-9). Claim 60 is a computer program product claim having similar limitations to claim 55. Specifically, claim 60 recites a computer program product comprising "program code configured to maintain the computer memory, a network accessible compilation of entries, selected of the entries comprising a network protocol address and a corresponding identifier of a process connected to the computer network, the network protocol address of the corresponding process assigned to the process upon connection to the computer network" (claim 60, lines 6-11). Claims 55 and 60 and their subsequent dependent claims are believed patentable over the art of record. The Examiner has not shown where any of the cited references disclose or suggest a database for storing network protocol addresses where the network protocol addresses have been assigned to a process upon the processes connection to the computer network, as now claimed.

Claim 66 is directed to a computer program product for use with a client process in accordance with the inventive client/server system of the present invention. Specifically, claim 66 recites a computer program product comprising program code configured to access a directory database, the database having a network protocol address for a selected plurality of processes having online status with respect to the computer network, the network protocol address of each respective process forwarded to the database following connection to the computer network" (claim 66, lines 7-11). Claim 66 is believed patentable over the art of record substantially for the same reasons as claim 21.

Claim 67 is directed to a method of a client process in the inventive client/server system of the present invention, specifically, claim 67 recites a method of establishing a point-to-point communication between first and second processes comprising the step of "following connection of the first process to the computer network, forwarding to the address server a network protocol address at which the first process is connected to the computer network" (claim 67, lines

5-7). Applicants respectfully assert that claim 67 is patentably distinct over the art of record, whether considered singularly or in combination since none of the cited references disclose, teach or suggest a client process which forwards its network protocol address to an address server following connection of the process to the computer network.

Applicants' submit herewith a supplemental Information Disclosure Statement with this response containing references which have been made of record in co-pending application Serial No. 08/721,316.

In light of the foregoing amendments to the claims, Applicants respectfully assert that all claims currently under consideration now patentably distinguish over the art of record, including the cited references, whether considered singularly or in combination. The Examiner is respectfully requested to advance this case to issuance and send a notice to that effect. In the event that outstanding issues remain following the Examiner's review of this response, Applicants' attorney requests that the Examiner contact Applicants' attorney at the number listed below to set up a telephone interview to attempt to resolve any outstanding issues with the claims and before any further Office Actions are issued.

The Commissioner is hereby authorized to charge any fees or credits under 37 C.F.R. §1.16 and 1.17 to our deposit account No. 02-3038.

Respectfully submitted

Bruce D. Jobse Date: 3/1/99

Bruce D. Jobse, Esq. Reg. No. 33,518
KUDIRKA & JOBSE, LLP
Customer Number 021127
Tel: (617) 367-4600 Fax: (617) 367-4656